

Claims

1. Method for providing a presence service over an internet protocol network comprising the steps of:

receiving application layer signaling from users registering for said presence

service,

checking said signaling for spatial location information, and

storing said spatial location information for use in providing said presence service.

2. The method of claim 1, wherein said application layer signaling is according to a session initiation protocol.

3. The method of claim 2, wherein said spatial location information is received as a spatial location payload.

4. The method of claim 1, wherein said spatial location information is received as a spatial location payload.

5. The method of claim 1, further comprising the step of providing access to said spatial location information to one or more location based services.

6. The method of claim 5, wherein said access to said spatial location information is provided to said one or more location based services without providing access to associated user identity information.

7. The method of claim 1, further comprising the step of using said spatial location information in conjunction with a messaging service for providing messages to said users.

8. Method for using a presence service over an internet protocol (IP) network, comprising the steps of:

providing application layer signaling from a user registering spatial location information relating to said user for use by said presence server in providing presence services, said user

5 providing or receiving a message relating to use of said spatial location information by said presence service using said application layer signaling.

9. The method of claim 8, wherein said application layer signaling is according to a session initiation protocol.

10 10. The method of claim 9, wherein said spatial location information is provided as a spatial location payload.

11. The method of claim 8, wherein said spatial location information is provided as a spatial location payload.

15 12. The method of claim 8, wherein said step of providing or receiving a message relates to use of said spatial location information by said presence server in conjunction with a location based service.

20 13. The method of claim 8, further comprising the step of utilizing a location based service in conjunction with said step of providing or receiving said message.

14. The method of claim 8, wherein said step of providing application layer signaling includes the step of providing security for said spatial location information by encryption.

25 15. The method of claim 8, wherein said step of providing application layer signaling includes the step of providing security for said spatial location information by including security information for use by said presence service in handling said spatial location information.

30

16. The method of claim 8, further comprising the step of using said spatial location information in conjunction with a messaging service for said providing or receiving said message.

5 17. System, comprising:

a central server, responsive to an invitation message from an inviting user to exchange content with an invited user, for providing a presence query; and

a presence server, responsive to said presence query, for providing presence information relating to a registered user,

10 wherein said central server is responsive to said presence information relating to said invited user registered at said presence server, for use in deciding said content is sent to said invited user, stored or refused, wherein said presence query and invitation message are communicated according to an application layer control protocol and wherein said information relating to presence pertains to a spatial location of said user.

15 18. The system of claim 17, wherein said central server is also responsive to said invitation message for providing a subscription query and wherein said system further comprises a messaging server, responsive to said subscription query, for providing notification information relating to a request from a subscribed user for notification of an event, and wherein said central server is responsive to said notification information for
20 said use in deciding said content should be sent to said invited user, stored or refused.

19. The apparatus of claim 18, wherein said application control protocol is a session initiation protocol (SIP).

25 20. The apparatus of claim 19, wherein said information relating to presence and pertaining to said spatial location of said user is communicated as a spatial location payload.

21. The apparatus of claim 17, wherein said information relating to presence and pertaining to said spatial location of said user is communicated as a spatial location payload.

22. Method, comprising the steps of:

registering a first plurality of users to a presence service in response to a corresponding plurality of register requests from the first plurality of users, wherein said register requests include information relating to a corresponding communications state of each of said first plurality of users;

subscribing a second plurality of users to an instant messaging service in response to a corresponding plurality of subscribe requests from said second plurality of users, wherein said subscribe requests include information relating to a corresponding request for notification of an event or set of events and wherein said first plurality of users includes users from said second plurality of users;

receiving an invitation message from a user registered to said presence service to exchange content with another registered user also subscribed to the instant messaging service; and

determining said communications state and said request for notification of said another registered user and deciding said content should be sent to said another registered user or stored by said instant messaging service depending on said communications state and said request for notification of said another registered user.

23. The method of claim 22, wherein said register requests, subscribe requests, and invitation message conform to an application layer control protocol.

24. The method of claim 23 wherein said application control protocol is a session initiation protocol (SIP).

25. The apparatus of claim 22, wherein said information relating to presence pertains to a spatial location of said user.